

Mail Stop: **SEQUENCE**

PATENT

0508-1147

**IN THE U.S. PATENT AND TRADEMARK OFFICE**

In re application of

Dominque Yves Joel BURNOUF et al. Conf. 3024

Application No. 10/561,867 Group 1656

Filed July 6, 2006 Examiner A. Kim

PROTEIN CRYSTAL COMPRISING THE PROCESSIVITY CLAMP FACTOR OF  
DNA POLYMERASE AND A LIGAND, AND ITS USES

**RESPONSE TO NOTICE TO COMPLY WITH SEQUENCE RULES**  
**PURSUANT TO 37 C.F.R. § 1.821-1.825**

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

December 22, 2008

Sir:

In response the Notice to Comply with Requirements  
for Patent Applications Containing Nucleotide and/or Amino  
Acid Sequence Disclosures dated November 20, 2008, Applicants  
herein provide the following amendments and remarks.

**Amendments to the Specification** begin on page 2 of  
this paper.

**Remarks** begin on page 3 of this paper.

An **Appendix** is attached following the signature page  
of this paper.

**AMENDMENTS TO THE SPECIFICATION:**

**In the Sequence Listing:**

Please replace the Sequence Listing of record with the attached substitute Sequence listing (in paper and computer readable form (CRF)).

**REMARKS**

The foregoing amendments are presented to place the application in compliance with the Sequence Rules under 37 C.F.R. §§ 1.821-1.825.

Enclosed herewith is a substitute Sequence Listing in both paper and computer readable form (CRF) as required by 37 C.F.R. § 1.821(c) and (e). The substitute Sequence Listing corrects the errors noted in the Notice to Comply dated November 20, 2008. The Sequence Listing was also revised to update the current application information per US practice. The specification has also been amended to insert the attached paper copy and CRF of the Sequence Listing and/or to replace the Sequence Listing of record.

In particular, as indicated in the validation report, <223> of SEQ ID NO: 2 has been changed to "synthetic peptide".

Further, SEQ ID NO: 7 has been revised. Specifically, <213> of SEQ ID NO: 7 was revised to "artificial sequence" and to reflect the correct number of amino acids by adding two more amino acids at the end to make for a total of 210. The specification describes the binding site of the  $\beta$ -clamp of *E. coli* DNA polymerase III, i.e., the amino acids interacting with the P16 peptide as included in the region delimited by the amino acids at the positions 155 to 364 which is a total of 210 amino acids (SEQ ID NO: 7). See, for

instance, the discussion of such in the disclosure, in Table 2 on page 20.

Thus, there is support in the disclosure for SEQ ID NO: 7, which corresponds to the binding site of the  $\beta$ -clamp of *E. coli* DNA polymerase III.

Support for these revisions can be found in the sequences of the originally filed application. No new matter has been added. Accordingly, the submission complies with 37 C.F.R. § 1.821(g).

The content of the paper and computer readable copies of the Sequence Listing are the same, and thus this submission complies with 37 C.F.R. § 1.821(c) and (e).

The attached Sequence Listing was run through the USPTO Checker software (Version 4.4.0) (October 25, 2005) and no errors were found.

In view of the foregoing, it is believed that each requirement set forth in the Notice has been satisfied, and that the application is now in compliance with the Sequence Rules under 37 C.F.R. §§ 1.821-1.825.

Favorable action on the merits is respectfully  
requested.

Respectfully submitted,  
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JFW/ml

**APPENDIX:**

The Appendix includes the following item(s):

- ☒ - Sequence Listing in paper and computer readable form